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[54] MARINE PROPULSION SYSTEM FOR UNDERWATER VEHICLES

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[58] Field of Search 410/6, 38; 310/87; 114/20.2, 337, 338

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[57] ABSTRACT

A marine propulsion system for underwater vehicles includes motor inner stator assemblies disposed in hull portions of the vehicle, fixed blades extending outwardly from an after one of the hull portions, a shroud fixed to outer ends of the fixed blades and encircling the hull portions, and a motor outer stator assembly disposed in the shroud. A rotor hub is disposed in an annular recess formed by the hull portions, the hub having permanent magnets therein adjacent the motor inner stator assemblies, and has rotor blades mounted thereon and extending outwardly therefrom and being at least in part of a permanent magnet material, outer ends of the rotor blades being adjacent the motor outer stator assembly. Activation of the stator assemblies by a polyphase A.C. power source induces movement in the permanent magnets and rotor blades to cause the rotor hub and blades to rotate. The rotation of the rotor blades serves to provide propulsive thrust to the vehicle.

5 Claims, 6 Drawing Sheets

